

Dinah's incipient stages can be traced back to a weak circulation in the monsoon trough first noted on synoptic charts on 5 June in the west central Carolines. The system tracked west-northwestward passing just north of Ulithi atoll early on the 6th reaching tropical depression status the next day (Figure 4-3). As a strong subtropical ridge built westward, the depression crossed the Philippine Sea at a rapid pace up to 20 knots. On the 8th, it began to slow in forward speed and intensify about 200 nm east of Samar Island.

Following somewhat of a meandering course Dinah passed just north of Catanduanes Island on the 9th and veered temporarily to a northwest track in response to a short wave trough over the East China Sea. Aircraft reconnaissance indicated that Dinah had developed typhoon force winds in its northern semicircle during this period. An aircraft measurement shortly before landfall indicated a central pressure of 974 mb (10/0235Z) the lowest observed during the cyclone's lifetime. At landfall, the coastal town of Baler (15 nm south of the center) reported a minimum pressure of 979.8 mb and gusts to 46 knots while Casiguran 35 nm north of the center measured a gust to 47 knots (Figure 4-4).

Dinah cut across Luzon's mountainous terrain in less than 6 hours emerging north of the Lingayen Gulf near the town of San Fernando. Torrential rains (24 hour totals up to 19.4 inches at Virac and 15.4 inches at Baler) set off flash flooding and landslides in the island Republic claiming a toll of 73 dead and 33 missing. Estimates of damage caused by Dinah were approximately \$1 million.

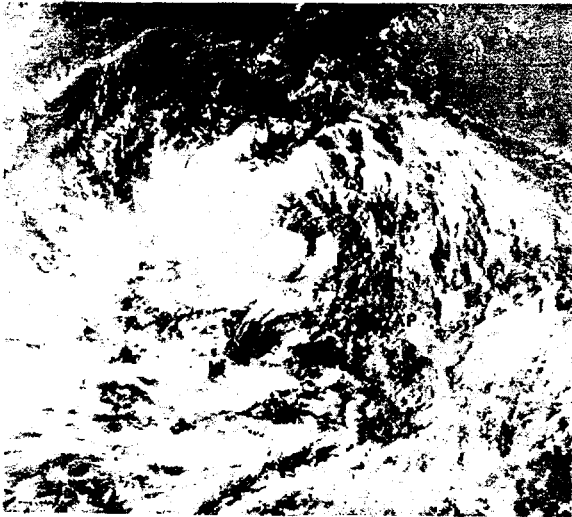


FIGURE 4-3. Formative stages of Dinah centered 200nm northwest of Yap, 6 June 1974, 2330Z. [DMSP imagery]

Dinah assumed a westerly course after exiting Luzon regaining typhoon strength by midday on the 11th. Aircraft reconnaissance reported a central pressure of 978 mb (11/0855Z) within a broad center estimated to be 50 nm in diameter. The Japanese ship MATSUSHIMA MARU passed about 40 nm east of the center a few hours later (11/1200Z) reporting a minimum pressure of 980.8 mbs. Dinah's central pressure varied little thereafter, and its center remained broad until landfall on Hainan Island.

As a high pressure region over South China advanced into the East China Sea, Dinah shifted course for the Luichow peninsula on the 12th. Rebuilding pressures, however, blocked Dinah from crossing the South China coast. Following transit of northern Hainan Island, Dinah weakened to tropical storm strength and entered North Vietnam south of Haiphong quickly dissipating once inland.

While in the South China Sea, Dinah's circulation was extensive; radius of the area within the 1000 mb isobar was about 360 nm by the 11th. On this day, Pratas Island 150 nm north of the center reported sustained winds (10 min) of 30 knots (11/1200Z), and the Japanese ship NISSHO MARU 125 nm east of the center reported estimated winds of 45 knots. By the 12th, an unidentified ship caught 60 nm north of the center reported estimated winds of 45 knots (12/0000Z). Later that day, the Chinese meteorological station on the Paracel Islands 120 nm south of the center recorded sustained winds (10 min) of 45 knots. Strong gusty winds were also felt in Hong Kong on the 12th as the eye of Dinah passed some 250 to 200 nm south and southwest. Wagland Island in the Colony reported gusts up to 60 knots and the Royal Observatory gusts to 64 knots.

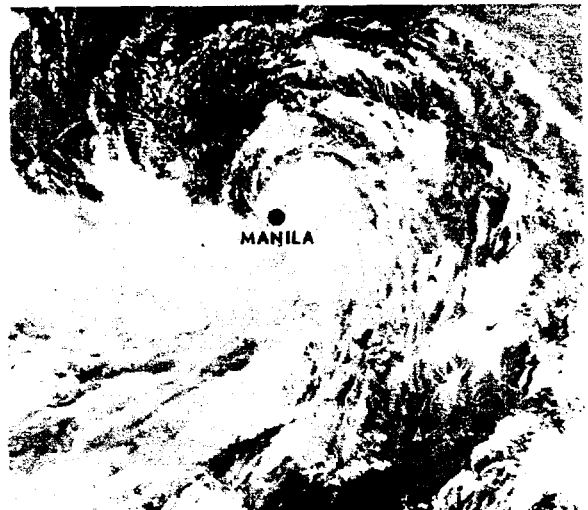


FIGURE 4-4. Typhoon Dinah a few hours from landfall on Luzon island near Baler, 10 June 1974, 0017Z. [DMSP imagery]